



SEQUENCE LISTING

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FEB 26 2001

TECH CENTER 1600/2900

<110> Niewiarowski, Stefan
Marcinkiewicz, Cezary
Temple University, of the Commonwealth System of Higher Education

<120> EC-3, An Inhibitor of Alpha 4 Beta 1 and Alpha 4 Beta 7
Integrins

<130> 6056-236PC

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<150> 60/055,825

<151> 1997-08-15

<150> 60/055,957

<151> 1997-08-18

<160> 20

<170> PatentIn Ver. 2.0

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<213> Echis carinatus

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<222> (11)

<223> K or T

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<222> (6)

<223> preliminary amino acid sequence

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Gly Glu His Xaa Ile Ser Gly Pro
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Asn Ser Val His Pro Cys Cys Asp Pro Val Lys Cys Glu Pro Arg Glu
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Gly Glu His Cys Ile Ser Gly Pro Cys Cys Arg Asn Cys Tyr Phe Leu
20 25 30

Arg Ala Gly Thr Val Cys Lys Arg Ala Val Gly Asp Asp Val Asp Asp
35 40 45

Tyr Cys Ser Gly Ile Thr Pro Asp Cys Pro Arg Asn Arg Tyr Lys Gly
50 55 60

Lys Glu Asp
65

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<213> Echis carinatus

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Asn Ser Val His Pro Cys Cys Asp Pro Val Lys Cys Glu Pro Arg Glu
1 5 10 15

Gly Glu His Cys Ile Ser Gly Pro Cys Cys Arg Asn Cys Lys Phe Leu
20 25 30

Asn Ala Gly Thr Ile Cys Lys Arg Ala Met Leu Asp Gly Leu Asn Asp
35 40 45

Tyr Cys Thr Gly Ile Ser Thr Asp Cys Pro Arg Asn Arg Tyr Lys Gly
50 55 60

Lys Glu Asp
65

<210> 4
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<213> Echis carinatus

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Lys Arg Ala Arg Gly Asp Asp Met Asp Asp Tyr
1 5 10

<210> 5
<211> 11
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Lys Arg Ala Val Gly Asp Asp Val Asp Asp Tyr
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<210> 6
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<400> 6
Lys Arg Ala Met Leu Asp Gly Leu Asn Asp Tyr
1 5 10

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Arg Ala Gly Thr Val Cys Lys Arg Ala Val Gly Asp Asp Met Asp Asp
35 40 45

Tyr Cys Thr Gly Ile Ser Ser Asp Cys Pro Arg Asn Pro Tyr Lys Asp
50 55 60

<210> 8

<211> 49

<212> PRT

<213> Eristocophis macmahonii

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Asp Tyr Cys Thr Gly Lys Ser Cys Asp Cys Pro Arg Asn Pro Trp Asn
35 40 45

Gly

<210> 9

<211> 49

<212> PRT

<213> Echis carinatus

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Glu Cys Glu Ser Gly Pro Cys Cys Arg Asn Cys Lys Phe Leu Lys Glu
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Gly Thr Ile Cys Lys Arg Ala Arg Gly Asp Asp Met Asp Asp Tyr Cys
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Asn Gly Lys Thr Cys Asp Cys Pro Arg Asn Pro His Lys Gly Pro Ala
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Thr

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<211> 70

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<213> Trimeresurus flavoviridis

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Ala Thr Cys Lys Leu Arg Pro Gly Ala Gln Cys Ala Asp Gly Leu Cys
20 25 30

Cys Asp Gln Cys Arg Phe Lys Lys Lys Thr Gly Ile Cys Arg Ile Ala
35 40 45

Arg Gly Asp Phe Pro Asp Asp Arg Cys Thr Gly Leu Ser Asn Asp Cys
50 55 60

Pro Arg Trp Asn Asp Leu
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<210> 11

<211> 68

<212> PRT

<213> Calloselasma rhodostoma

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Gly Lys Glu Cys Asp Cys Ser Ser Pro Glu Asn Pro Cys Cys Asp Asp
1 5 10 15

Ala Thr Cys Lys Leu Arg Pro Gly Ala Gln Cys Gly Glu Gly Leu Cys
20 25 30

Cys Glu Gln Cys Lys Phe Ser Arg Ala Gly Lys Ile Cys Arg Ile Pro
35 40 45

Arg Gly Asp Met Pro Asp Asp Arg Cys Thr Gly Gln Ser Ala Asp Cys
50 55 60

Pro Arg Tyr His
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<210> 12
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<213> Artificial Sequence

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peptide

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<210> 13
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peptide

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Arg Gly Asp Ser

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5

10

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<213> Artificial Sequence

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Met Leu Asp Gly Leu

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<210> 19

<211> 67

<212> PRT

<213> Echis carinatus

<220>

<221> VARIANT

<222> (33)

<223> R or N

<220>

<221> VARIANT

<222> (37)

<223> V or I

<220>

<221> VARIANT

<222> (64)

<223> G or D

<220>

<221> VARIANT

<222> (66)

<223> E or D

<400> 19

Asn Ser Val His Pro Cys Cys Asp Pro Val Lys Cys Glu Pro Arg Glu

1 5 10 15

Gly Glu His Cys Ile Ser Gly Pro Cys Cys Arg Asn Cys Tyr Phe Leu

20 25 30

Xaa Ala Gly Thr Xaa Cys Lys Arg Ala Val Gly Asp Asp Val Asp Asp

35 40 45

Tyr Cys Ser Gly Ile Thr Pro Asp Cys Pro Arg Asn Arg Tyr Lys Xaa

50 55 60

Lys Xaa Asp
65

<210> 20
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<212> PRT
<213> Echis carinatus

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<222> (11)
<223> K or T

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<222> (40)
<223> R or K

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<222> (55)
<223> T or S

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Asn Ser Val His Pro Cys Cys Asp Pro Val Xaa Cys Glu Pro Arg Glu
1 5 10 15

Gly Glu His Cys Ile Ser Gly Pro Cys Cys Arg Asn Cys Lys Phe Leu
20 25 30

Asn Ala Gly Thr Ile Cys Lys Xaa Ala Met Leu Asp Gly Leu Asn Asp
35 40 45

Tyr Cys Thr Gly Ile Ser Xaa Asp Cys Pro Arg Asn Arg Tyr Lys Gly
50 55 60

Lys Glu Asp
65